Serial No.: New Div. Appln. Filed: June 23, 2003

Page : 2 of 12

## In the specification:

## Beginning at page 1, line 2, insert the following paragraph:

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a divisional application of U.S. Application Serial No. 09/796,412, filed on February 27, 2001, which claims the benefit of a foreign priority application filed in Japan, Serial No. 2000-054963, filed February 29, 2000, all of which are incorporated by reference.

### Please amend the paragraph beginning at page 6, line 1 as follows:

[Expression 1]

$$Id = \frac{1}{2} * \mu * C_0 * \frac{W}{L} * (Vgs - Vth)^2$$

## Please amend the paragraph beginning at page 10, line 1 as follows:

[Expression 2]

$$\frac{W}{L}*(Vgs-Vth)^2-\frac{2*Id}{\mu*C_0}$$

#### Please amend the paragraph beginning at page 10, line 8 as follows:

[Expression 3]

$$\frac{W}{L}*(Vgs-Vth)^2-A$$

#### Please amend the paragraph beginning at page 10, line 14 as follows:

[Expression 4]

$$\frac{(Vgs - Vth + \Delta Vth)^2}{(Vgs - Vth)^2} \le 1 + \frac{n}{100}$$

Serial No.: New Div. Appln. Filed: June 23, 2003

Page : 3 of 12

#### Please amend the paragraph beginning at page 10, line 15 as follows:

[Expression 5]

$$1 - \frac{n}{100} \le \frac{(Vgs - Vth - \Delta Vth)^2}{(Vgs - Vth)^2}$$

### Please amend the paragraph beginning at page 10, line 18 as follows:

[Expression 6]

$$|\Delta V t t| \le \left(\sqrt{1 + \frac{n}{100}} - 1\right) * V'$$

## Please amend the paragraph beginning at page 11, line 2 as follows:

[Expression 7]

$$V^{\prime 2} = A * L/W$$

#### Please amend the paragraph beginning at page 11, line 4 as follows:

[Expression 8]

$$|\Delta Vth| \le \left(\sqrt{1 + \frac{n}{100}} - 1\right) * \sqrt{A * L/W}$$

#### Please amend the paragraph beginning at page 11, line 7 as follows:

[Expression 9]

$$\frac{W}{L} \le \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta V t h^2}$$

Serial No.: New Div. Appln. Filed: June 23, 2003

Page : 4 of 12

#### Please amend the paragraph beginning at page 11, line 14 as follows:

[Expression 10]

$$\frac{W}{L} \ge \frac{A}{\left( Vgs_{(max)} - Vth \right)^2}$$

## Please amend the paragraph beginning at page 11, line 16 as follows:

[Expression 11]

$$\frac{A}{\left(\mathsf{Vgs}_{(max)} - Vth\right)^2} \le \frac{W}{L} \le \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}$$

## Please amend the paragraph beginning at page 12, line 23 as follows:

[Expression 12]

$$|\Delta Vth| \le 0.025 * \sqrt{A*L/W}$$

#### Please amend the paragraph beginning at page 13, line 1 as follows:

[Expression 13]

$$\frac{A}{(\text{Vgs}_{(\text{max})} - Vth)^2} \le \frac{W}{L} \le 6.10^{\circ} 10^{-4} * \frac{A}{\Delta Vth^2}$$

#### Please amend the paragraph beginning at page 13, line 22 as follows:

[Expression 14]

$$|\Delta Vth| \le 0.015 * \sqrt{A * L/W}$$

Serial No.: New Div. Appln. Filed: June 23, 2003

Page : 5 of 12

#### Please amend the paragraph beginning at page 14, line 1 as follows:

[Expression 15]

$$\frac{A}{(Vgs_{(max)} - Vth)^2} \le \frac{W}{L} \le 2.22 * 10^{-4} * \frac{A}{\Delta Vth^2}$$

#### Please amend the paragraph beginning at page 15, line 14 as follows:

[Expression 16]

$$A = \frac{2ld}{\mu * C_0}$$

$$\frac{A}{\left(\mathsf{Vgs}_{(\max)} - Vth\right)^2} \le \frac{W}{L} \le \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}$$

## Please amend the paragraph beginning at page 16, line 11 as follows:

[Expression 17]

$$A = \frac{2Id}{u^*C_n}$$

$$\left|\Delta Vth\right| \le \left(\sqrt{1 + \frac{n}{100}} - 1\right) * \sqrt{A * L/W}$$

#### Please amend the paragraph beginning at page 17, line 24 as follows:

[Expression 18]

$$A = \frac{2Id}{\mu * C_n}$$

$$\frac{A}{\left(\mathsf{Vgs}_{\mathsf{(max)}} - Vth\right)^2} \le \frac{W}{L} \le \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}$$

Serial No.: New Div. Appln. Filed: June 23, 2003

Page : 6 of 12

#### Please amend the paragraph beginning at page 19, line 11 as follows:

[Expression 19]

$$A = \frac{2Id}{\mu * C_0}$$

$$|\Delta V th| \le (\sqrt{1 + \frac{n}{100}} - 1) * \sqrt{A * L/W}$$

#### Please amend the paragraph beginning at page 20, line 16 as follows:

[Expression 20]

$$A = \frac{2Id}{\mu * C_0}$$

$$\frac{A}{(\operatorname{Vgs}_{(\max)} - Vth)^2} \le \frac{W}{L} \le \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}$$

## Please amend the paragraph beginning at page 21, line 15 as follows:

[Expression 21]

$$A = \frac{2Id}{\mu * C_n}$$

$$\left|\Delta Vth\right| \leq (\sqrt{1+\frac{n}{100}}-1)^{\circ} \sqrt{A^*L/W}$$

## Please amend the paragraph beginning at page 24, line 15 as follows:

[Expression 22]

$$Id = 3*(84*10^{-1})*(252*10^{-1}) = 6.35*10^{-7}A$$

Serial No.: New Div. Appln. Filed: June 23, 2003

Page : 7 of 12

## Please amend the paragraph beginning at page 25, line 2 as follows:

[Expression 23]

$$Id = 6.35*10^{-7}/0.3 = 2.11\mu A$$

#### Please amend the paragraph beginning at page 25, line 7 as follows:

[Expression 24]

$$A = \frac{2*Id}{\mu^*C_0} = 1.41(A)$$

## Please amend the paragraph beginning at page 25, line 13 as follows:

[Expression 25]

$$\left|\Delta Vth\right| \leqq 0.029 * \sqrt{L/W}$$

### Please amend the paragraph beginning at page 25, line 14 as follows:

[Expression 26]

$$2.26*10^{-3} \le \frac{W}{L} \le \frac{8.60*10^{-4}}{\Delta V th^2}$$

#### Please amend the paragraph beginning at page 26, line 5 as follows:

[Expression 27]

$$|\Delta Vth| \le 0.079(V)$$

Serial No.: New Div. Appln. Filed : June 23, 2003

Page : 8 of 12

## Please amend the paragraph beginning at page 26, line 13 as follows:

[Expression 28]

$$2.26*10^{-3} \le \frac{W}{L} \le 0.086$$

## Please amend the paragraph beginning at page 65, line 16 as follows:

[Expression 29]

$$Id = 3*(84*10^{-4})*(252*10^{-4}) = 6.35*10^{-7}A$$

#### Please amend the paragraph beginning at page 66, line 2 as follows:

[Expression 30]

$$Id = 6.35*10^{-7}/0.3 = 2.11 \mu A$$

## Please amend the paragraph beginning at page 66, line 7 as follows:

[Expression 31]

$$A = \frac{2*Id}{\mu * C_0} = 3.52(A)$$

### Please amend the paragraph beginning at page 66, line 13 as follows:

[Expression 32]

$$\left|\Delta Vth\right| \le 0.046 * \sqrt{L/W}$$

Attorney's Docket No.: 07977-266002 / US4665D1

Applicant: Shunpei Yamazaki et al.

Serial No.: New Div. Appln. Filed: June 23, 2003 Page: 9 of 12

## Please amend the paragraph beginning at page 66, line 14 as follows:

[Expression 33]

$$2.26 * 10^{-3} \le \frac{W}{L} \le \frac{2.14 * 10^{-3}}{\Delta V t h^{2}}$$

## Please amend the paragraph beginning at page 67, line 6 as follows:

[Expression 34]

$$2.26*10^{-3} \le \frac{W}{L} \le 0.214$$

## Please amend the paragraph beginning at page 68, line 7 as follows:

[Chemical Formula 1]

## Please amend the paragraph beginning at page 68, line 12 as follows:

[Chemical Formula 2]

Applicant: Shunpei Yamazaki et al.
Serial No.: New Div. Appln.
Filed: June 23, 2003
Page: 10 of 12

# Please amend the paragraph beginning at page 68, line 19 as follows:

# [Chemical Formula 3]

